AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT AND ELECTION OF Attorney Docket No.: Q86074

Application No.: 10/522,688

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (original): Method for coating the surface of a metal material having a

crystallographic structure, according to which the material is first coated with a layer of a metal

or a metal alloy having a melting point equal to  $T_f$  and a thickness less than or equal to 2.5  $\mu$ m,

characterised in that:

- the first coating is subjected to thermal processing using a rapid heating means in order

to bring the surface of the first coating to a temperature of between  $0.8T_f$  and  $T_f$ ;

- a second coating is deposited from a metal or a metal alloy having a thickness less than

or equal to 1 µm.

2. (previously presented): Method according to claim 1, characterised in that the first

and second coatings have melting points less than or equal to 700°C.

3. (previously presented): Method according to claim 1, characterised in that the first

and second coatings are constituted by the same material.

4. (previously presented): Method according to claim 1, characterised in that a

transparent mineral film is then deposited on the second coating.

5. (previously presented): Method according to claim 1, characterised in that the metal

material to be coated is a carbon steel.

6. (previously presented): Method according to claim 1, characterised in that the metal

material to be coated is a stainless steel.

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7. (previously presented): Method according to claim 1, characterised in that the metal material to be coated is aluminium or one of the alloys thereof.

- 8. (previously presented): Method according to claim 1, characterised in that the first coating is produced by means of electrodeposition.
- 9. (currently amended): Method according to claim 1, characterised in that the first coating is produced by a physical vapour vapor deposition method.
- 10. (previously presented): Method according to claim 1, characterised in that the means for rapid heating is an infra-red heating device.
- 11. (previously presented): Method according to claim 1, characterised in that the means for rapid heating is an induction heating device.
- 12. (previously presented): Method according to claim 1, characterised in that the means for rapid heating is a device for discharge with plasma with a non-reactive gas.
- 13. (previously presented): Method according to claim 1, characterised in that the means for rapid heating is a device for ion bombardment with a non-reactive gas.
- 14. (previously presented): Method according to claim 1, characterised in that the second coating is produced by means of electrodeposition.
- 15. (currently amended): Method according to claim 1, characterised in that the second coating is produced by means of a physical vapour vapor deposition method.
- 16. (currently amended): Method according to claim 4, characterised in that the transparent mineral film is deposited by means of a reactive plasma assisted chemical vapour vapor deposition method.

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17. (previously presented): Method according to claim 1, characterised in that the first and/or second coating(s) is/are constituted by tin.

- 18. (previously presented): Method according to claim 1, characterised in that the first and/or second coating(s) is/are constituted by aluminium.
- 19. (previously presented): Method according to claim 1, characterised in that the mineral film is constituted by a metal oxide or a mixture of metal oxides.
- 20. (original): Method according to claim 19, characterised in that the metal oxide(s) is/are selected from the oxides of austenitic stainless steel, chromium, titanium, silicon, zinc, tin.
- 21. (previously presented): Method according to claim 1, characterised in that the metal material is in the form of a moving strip, and in that the various method steps are carried out continuously by means of installations which are arranged successively over the path of the moving strip.
- 22. (original): Device for coating a metal material in the form of a strip, characterised in that it comprises means for moving the strip and, arranged successively over the path of the strip:
- first means for coating the strip with a layer of a metal or a metal alloy having a melting point equal to  $T_{\rm f}$ ;
- means for rapidly heating the strip which can bring the surface of the layer to a temperature of between  $0.8T_{\rm f}$  and  $T_{\rm f}$ , and
  - second means for coating the strip with a layer of metal or metal alloy.
- 23. (original): Device according to claim 22, characterised in that it comprises, downstream of the second means for coating the strip with a layer of a metal or a metal alloy, means for coating the strip with a transparent mineral film.

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24. (original): Metal material, characterised in that it comprises, on at least one of the surfaces thereof, a metal coating having a three-dimensional visual effect, the coating being

formed directly on the surface of the material.

25. (previously presented): Metal material according to claim 24, characterised in that it

is produced using a method according to which

the material is first coated with a layer of a metal or a metal alloy having a melting point

equal to T<sub>f</sub> and a thickness less than or equal to 2.5μm,

- the first coating is subjected to thermal processing using a rapid heating means in order

to bring the surface of the first coating to a temperature of between 0.8Tf and Tf; and

- a second coating is deposited from a metal or a metal alloy having a thickness less than

or equal to  $1\mu m$ .

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